

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

In re Patent Application Serial No. 09/823,500

Filed: March 30, 2001

For: **DIGITAL MODULATION SIGNAL RECEIVER WITH ADAPTIVE CHANNEL  
EQUALIZATION EMPLOYING DISCRETE FOURIER TRANSFORMS**

Applicants: James Douglas McDonald & Allen LeRoy Limberg

TC/A. U.: 2631

Examiner: Young Toe TSE

Atty. Dkt. No. ALRL03A

Customer No. 43704

The Honorable Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO FIRST OFFICE ACTION**

Sir:

This response is to the first Office Action mailed 13 December 2004.

The first Office Action does not take into account the preliminary amendment and prior art statement that Applicants mailed to the Patent and Trademark Office on 23 November 2004.

**Amendments to the Specification** begin on page 2 of this paper.

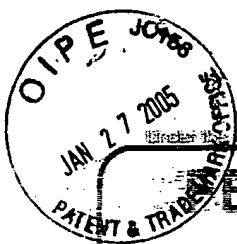
**Amendments to the Claims** are reflected in the listing of claims which begins on page 3 of this paper.

**Remarks/Arguments** begin on page 33 of this paper.

01/31/2005 ZJUHA1 00000059 09823500

01 FC:2202  
02 FC:1999

50.00 OP  
21.00 OP



# FREE TRANSMITTAL for FY 2005

Effective 10/01/2004, Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT **(3)** 71

Complete if Known	
Application Number	09/823,500
Filing Date	March 30, 2001
First Named Inventor	James Douglas McDonald
Examiner Name	Young Toe TSE
Art Unit	2631
Attorney/Agent No.	ALRL03A

**METHOD OF PAYMENT** (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account

Deposit Account Number:   
Deposit Account Name:

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments

☐ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

**FEE CALCULATION**

**1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 730	2001 295	Utility filing fee	
1002 350	2002 175	Design filing fee	
1003 550	2003 275	Plant filing fee	
1004 790	2004 395	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(3) 0</b>

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims: **31** - 20\*\* = **3** X **9** = **27**

Independent Claims: **6** - 3\*\* = **1** X **44** = **44**

Multiple Dependent: **0**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 88	2201 44	Independent claims in excess of 3	
1203 300	2203 150	Multiple dependent claim, if not paid	
1204 98	2204 44	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>			<b>(3) 71</b>

\*\* number previously paid, if greater. For Reissues, see above

**3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 55	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	2053 55	Non-English specification	
1012 2,520	2012 1,260	For filing a request for ex parte reexamination	
1004 720	2004 360	Requesting publication of SIR prior to Examiner action	
1005 1,840	2005 920	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 430	2252 215	Extension for reply within second month	
1253 960	2253 480	Extension for reply within third month	
1254 1,530	2254 765	Extension for reply within fourth month	
1255 2,060	2255 1,030	Extension for reply within fifth month	
1401 340	2401 170	Notice of Appeal	
1402 340	2402 170	Filing a brief in support of an appeal	
1403 300	2403 150	Request for oral hearing	
1451 1,510	2451 755	Petition to institute a public use proceeding	
1452 140	2452 70	Petition to revive - unavoidable	
1453 1,370	2453 685	Petition to revive - unintentional	
1501 1,530	2501 765	Utility issue fee (for reissue)	
1502 480	2502 240	Design issue fee	
1503 660	2503 330	Plant issue fee	
1450 130	2450 65	Petitions to the Commissioner	
1807 50	2807 25	Processing fee under 37 CFR 1.17(g)	
1806 160	2806 80	Submission of Information Disclosure Sheet	
8021 40	28021 20	Recording each patent assignment per property (times number of properties)	
1809 790	2809 395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 790	2810 395	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	2802 450	Request for expedited examination of a design application	
Other fee (specify): <input type="text"/>			
Reduced by Basic Filing Fee Paid			<b>SUBTOTAL (3) (3) 0</b>

**SUBMITTED BY**

Name (if not type): **Allen LeRoy Limberg** Registration No.: **27, 211** Telephone: **941-625-7024**

Signature: *Allen LeRoy Limberg* Date: **01/25/2005**

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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